

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

25944	7590	09/24/2003			EXAM	INER
OLIFF & BERR	IDGE, PLC	,			L	
P.O. BOX 19928					ERDEM	, FAZLI
ALEXANDRIA, VA 22320						
					ART UNIT	CLASS-SUBCLASS
					2826	257-738000
					DATE MAILED: 09/24/200	3
APPLICATION NO.	FILING	DATE	FIRST NAME	D INVENTOR	ATTORNEY DOOKET NO.	CONFIRMATION NO.
09/969,827	07/23/	2001	Yutaka	Kaneda	105[28.01	2866
TITLE OF INVENTION	LEXIBLE PRI	NTED WIRING BO	ARDS		T	
APPLN. TYPE	SMALL E	NTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NC)	\$1300	\$300	\$1600	12/24/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

or <u>Fax</u> (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

09/24/2003

OLIFF & BERRIDGE, PLC P.O. BOX 19928 **ALEXANDRIA, VA 22320**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

issinitied to the OSI 10, on the date indicated below.	
	(Depositor's name)
	(Signature)
	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909 827	07/23/2001	Yutaka Kaneda	105128 01	2866

TITLE OF INVENTION: FLEXIBLE PRINTED WIRING BOARDS

APPLN. TYPE	SMALL ENTITY ISSUE FE		EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	isional NO \$1300			\$300	\$1600	12/24/2003
EXAN	MINER	ART UN	IT	CLASS-SUBCLASS	٦	
ERDEM, FAZLI 283				257-738000	_	
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			names of agents Of firm (hav	nting on the patent front page f up to 3 registered patent R, alternatively, (2) the name ing as a member a registered d the names of up to 2 regis	attorneys or 1 of a single 1 attorney or 2	
O "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			attorneys or agents. If no name is listed, no name will be printed.			

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or	r categories (will not be printed on the patent);	☐ individual	☐ corporation or other private group entity	government
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):			
☐ Issue Fee	A check in the amo	unt of the fee(s)	is enclosed.	
☐ Publication Fee	☐ Payment by credit	card. Form PTO-	2038 is attached.	
Advance Order - # of Copies	☐ The Director is he Deposit Account Num	reby authorized	by charge the required fee(s), or credit any (enclose an extra copy of this	
Director for Patents is requested to apply the Issu	e Fee and Publication Fee (if any) or to re-apply	any previously p	aid issue fee to the application identified abo	ove.
(Authorized Signature)	(Date)			
NOTE; The Issue Fee and Publication Fee (if other than the applicant; a registered attorney interest as shown by the records of the United S	required) will not be accepted from anyone or agent; or the assignee or other party in tates Patent and Trademark Office.			
This collection of information is required by 3 obtain or retain a benefit by the public which application. Confidentiality is governed by 35 L estimated to take 12 minutes to complete, including the completed application form to the USPTO. To case. Any comments on the amount of time suggestions for reducing this burden, should be patent and Trademark Office, U.S. Depart 22313-1450. DO NOT SEND FEES OR CC SEND TO: Commissioner for Patents, Alexandre	is to file (and by the USPTO to process) an J.S.C. 122 and 37 CFR 1.14. This collection is uding gathering, preparing, and submitting the time will vary depending upon the individual eyou require to complete this form and/or esent to the Chief Information Officer, U.S. timent of Commerce, Alexandria, Virginia DMPLETED FORMS TO THIS ADDRESS.			
Under the Paperwork Reduction Act of 199 collection of information unless it displays a val	5, no persons are required to respond to a id OMB control number.			



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	. F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO		
09/909,827	09/909,827 07/23/2001		Yutaka Kaneda	105128.01	2866		
25944	7590 09/24/2003			EXAM	EXAMINER		
OLIFF & BE P.O. BOX 199		PLC		ERDEM	, FAZLI		
ALEXANDRI		20		ART UNIT	PAPER NUMBER		
	,			2826			
				DATE MAILED: 09/24/200	3		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 ww.uspto.go

APPLICATION NO	. FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/909,827 07/23/2001		07/23/2001	Yutaka Kaneda	105128.01 2866		
25944	7590	09/24/2003		EXAMINER		
OLIFF & BE	•	PLC		ERDEM	, FAZLI	
P.O. BOX 199 ALEXANDRI	_	20		ART UNIT	PAPER NUMBER	
	•			2826	<u> </u>	
				DATE MAILED: 09/24/200	3	

Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))......\$665.00 By other than a small entity......\$1,330.00

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a)).....\$240.00 By other than a small entity......\$480.00

By a small entity (Sec. 1.27(a))......\$320.00

By other than a small entity......\$640.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

			ton
	Application No.	Applicant(s)	
Al-4i-a-a-6 All	09/909,827	KANEDA ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Fazli Erdem	2826	
The MAILING DATE of this communication app All daims being allowable, PROSECUTION ON THE MERITS Is herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT I of the Office or upon petition by the applicant. See 37 CFR 1.32	S (OR REMAINS) CLOSE 5) or other appropriate con RIGHTS. This application	D in this application. If not include nmunication will be mailed in due	ed course. THIS
1. This communication is responsive to 7/2/03.			
2. X The allowed claim(s) is/are <u>25-29</u> .			
3. ☑ The drawings filed on <u>23 July 2001</u> are accepted by the l	Examiner.		
 Acknowledgment is made of a claim for foreign priority unally All b) ☐ Some* c) ☐ None of the: 	nder 35 U.S.C. § 119(a)-(c	l) or (f).	
1. Certified copies of the priority documents have	ve been received.		
2. Certified copies of the priority documents have	ve been received in Applic	ation No. <u>09/477,815</u> .	
3. Copies of the certified copies of the priority d	locuments have been rece	ived in this national stage applica	tion from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority	under 35 U.S.C. § 119(e)	(to a provisional application).	
(a) The translation of the foreign language provisional	application has been rece	ived.	
6. 🛛 Acknowledgment is made of a claim for domestic priority	under 35 U.S.C. §§ 120 a	nd/or 121.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" below. Failure to timely comply will result in ABANDONMENT of the comply and the complex of the complex o	of this application. THIS Tomitted. Note the attached	HREE-MONTH PERIOD IS NOT EXAMINER'S AMENDMENT or N	EXTENDABLE
INFORMAL PATENT APPLICATION (PTO-152) which gives rea	ason(s) why the oath or de	claration is deficient.	
8. CORRECTED DRAWINGS must be submitted.			
(a) ☐ including changes required by the Notice of Draftspe	erson's Patent Drawing Re	view (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No			
(b) including changes required by the proposed drawing	g correction filed, v	vhich has been approved by the E	Examiner.
(c) ☐ including changes required by the attached Examine	er's Amendment / Comme	nt or in the Office action of Paper	No
Identifying indicia such as the application number (see 37 CFR each sheet.	1.84(c)) should be written o	n the drawings in the front (not the	back) of
9. DEPOSIT OF and/or INFORMATION about the department and DEPOSIT OF and/or INFORMATION about the department regarding REQUIREMENT FOR			Note the
Attachment(s)			
1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 5 Information Disclosure Statements (PTO-1449), Paper No. 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material SUPERVISORY PATECHNOLOGY CE	A☐ Inter 6☐ Exan 8⊠ Exan 9☐ Othe	re of Informal Patent Application (liview Summary (PTO-413), Paper niner's Amendment/Comment niner's Statement of Reasons for a r	No
	- 		

Application/Control Number: 09/909,827

Art Unit: 2826

DETAILED ACTION

Allowable Subject Matter

1. Claims 25-29 allowed.

2. The following is an examiner's statement of reasons for allowance: Prior art failed to establish a flexible printed wiring board comprising a metal film, a resin coating on the metal film, an opening formed in resin coating and a metal bump located in the opening connected at its bottom face to the metal film and having height greater than the thickness of the resin coating where the resin coating is removed at the portion located at a top face of the metal bump and top face of the metal bump is exposed from the surface of the resin coating.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fazli Erdem whose telephone number is (703) 305-3868. The examiner can normally be reached on M - F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/909,827

Page 3 Art Unit: 2826

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

FE